

CLAIMS

1. (Previously Presented) A method of determining an Internet Protocol (IP) address of an application server in a visited serving network, comprising:

receiving an IP address associated with a device on the network by a wireless mobile device;
performing a reverse domain name query by the wireless mobile device using the received IP address;

receiving, by the wireless mobile device, a response to the reverse domain name query comprising the visited serving network domain name, wherein the network is visited by the wireless mobile device and serving the wireless mobile device;

extracting, by the wireless mobile device, the serving network domain name from the received reverse domain name query;

selecting, by the wireless mobile device, an application server name as a function of a service desired by the wireless mobile device;

appending, by the wireless mobile device, the extracted serving network domain name to the application server name, thereby generating a domain-specific application server name;

performing, by the wireless mobile device, a domain name query using the domain-specific application server name; and

receiving, by the wireless mobile device, a response to the domain name query comprising a second IP address, the second IP address identifying an application server in the visited serving network, the application server capable of providing the service desired by the wireless mobile device.

2. (Previously Presented) The method of Claim 1, wherein receiving an IP address comprises receiving an IP address for the wireless mobile device.
3. (Previously Presented) The method of Claim 1, wherein receiving an IP address comprises receiving an IP address associated with a device providing an IP address to the serving network.
4. (Previously Presented) The method of Claim 3, wherein receiving an IP address associated with a device providing an IP address to the serving network comprises receiving an IP address of an access gateway.
5. (Currently Amended) The method of Claim 1, wherein the step of ~~deriving~~ extracting the serving network domain name information from the reverse domain name query further comprises deriving information from a Uniform Resource Identifier (URI).
6. (Previously Presented) The method of Claim 1, wherein the application server name comprises a Proxy Call Session Control Function (P-CSCF) server name.
- 7-14. (Canceled)
15. (Previously Presented) A system for determining an Internet Protocol (IP) address of an application server in a visited serving network, comprising:
- a wireless mobile device in communication with an access gateway of the serving network,
- wherein the wireless mobile device is configured to:

request an IP address associated with a device on the network from the serving network;

receive the requested IP address;

perform a reverse domain name query using the received IP address;

receive a response to the reverse domain name query comprising the visited serving network domain name, wherein the network is visited by the wireless mobile device and serving the wireless mobile device;

extract the serving network domain name information from the reverse domain name query;

select an application server name as a function of a service desired by the wireless mobile device;

append the extracted serving network domain name information to the application server name, thereby generating a domain-specific application server name;

perform a domain name query using the domain-specific application server name;

and

receive a response to the domain name query comprising a second IP address, the second IP address identifying an application server in the visiting serving network, the application server capable of providing the service desired by the wireless mobile device.

16. (Original) The system of Claim 15, wherein the serving network has a URI.

17. (Previously Presented) The system of Claim 15, wherein the IP address is the IP address of the wireless mobile device.

18. (Previously Presented) The system of Claim 15, wherein the IP address is the IP address of a device providing an IP address to the serving network.

19. (Previously Presented) The system of Claim 18, wherein the device providing an IP address to the serving network comprises the access gateway.

20. (Previously Presented) The system of Claim 15, wherein the wireless mobile device is configured to store the second IP address.